

Figure 1 is a block diagram of a computer system 100. The computer system 100 includes a processor 102, a bus 101, a main memory 104, a read only memory 106, a mass storage device 107, a display 121, a keyboard 122, a cursor control device 123, and a communication device 125. The processor 102 is connected to the bus 101. The main memory 104, read only memory 106, and mass storage device 107 are also connected to the bus 101. The display 121, keyboard 122, cursor control device 123, and communication device 125 are connected to the bus 101 via a system bus 110.

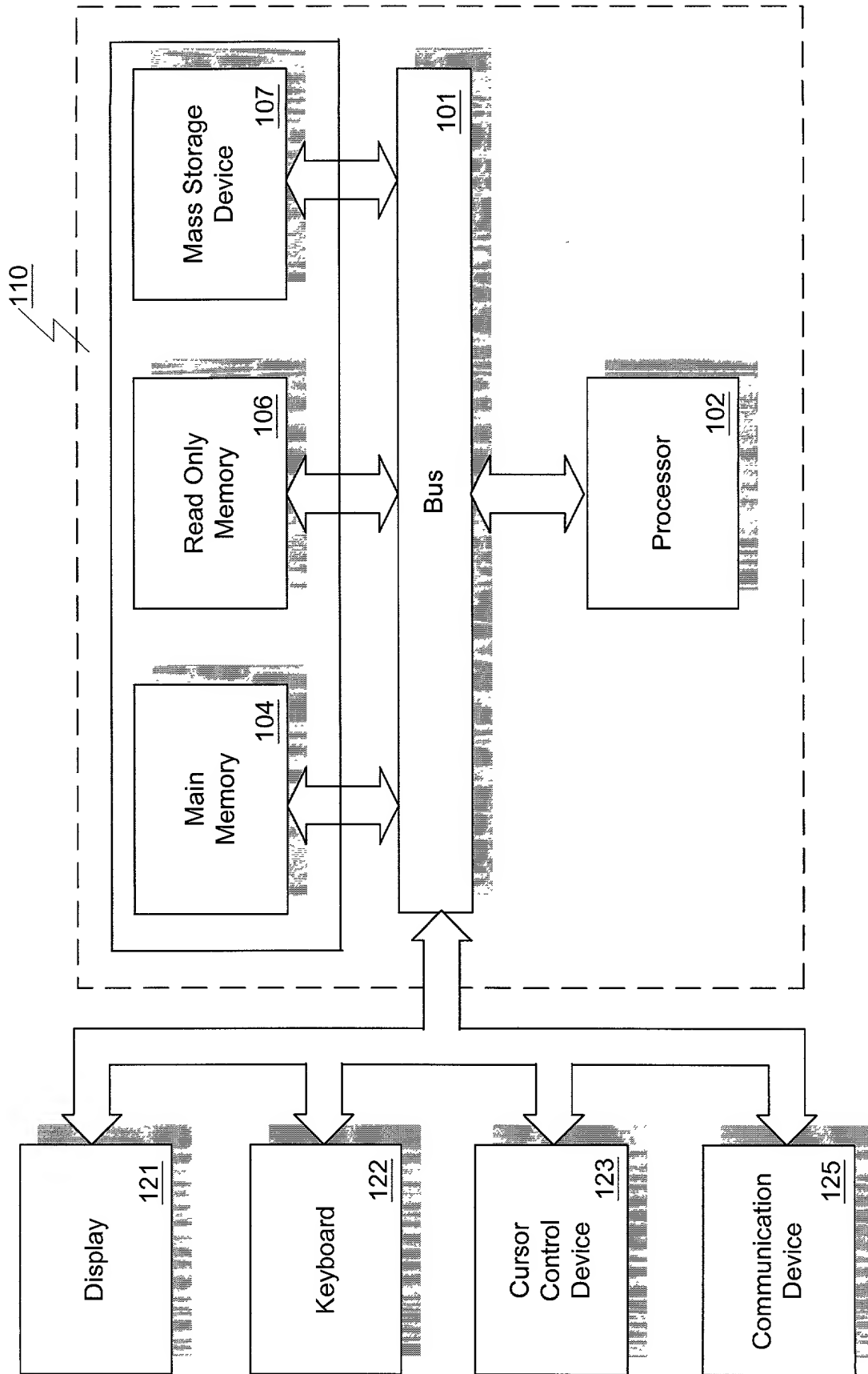


Figure 1

FIG. 2 is a block diagram of a network system. A Local System 220 is connected to a Network 210. The Network 210 is an Ethernet TCP/IP network. The Network 210 is connected to two Remote Independent Systems (entropy servers) 230 and 240.

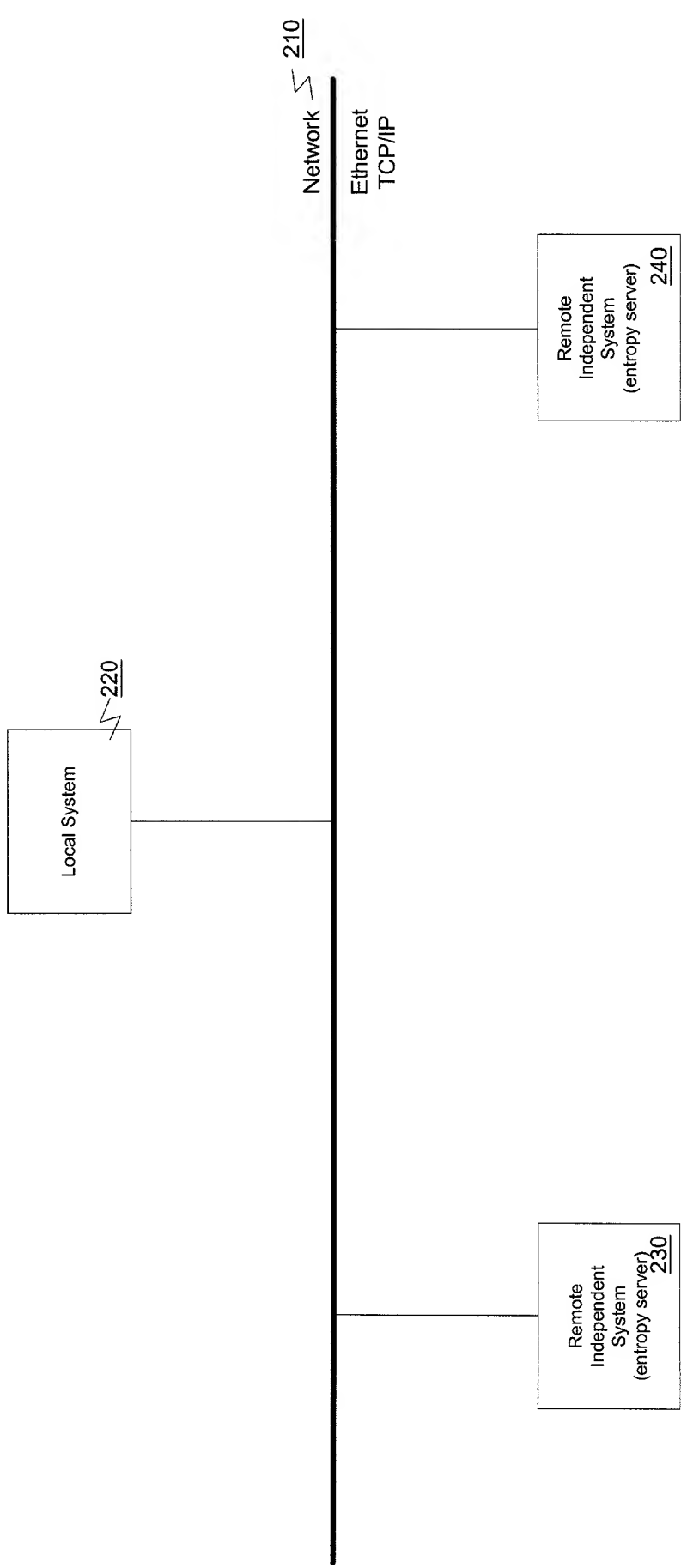


Figure 2

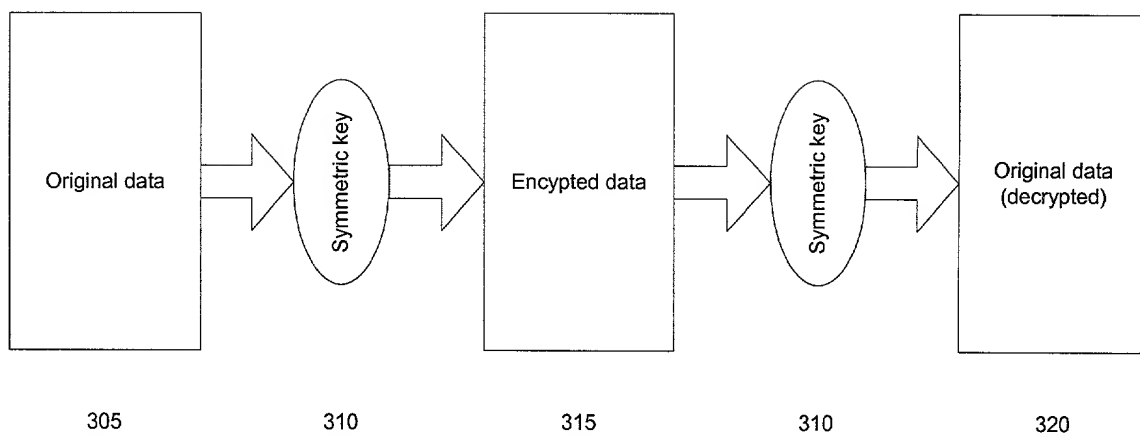


Figure 3A

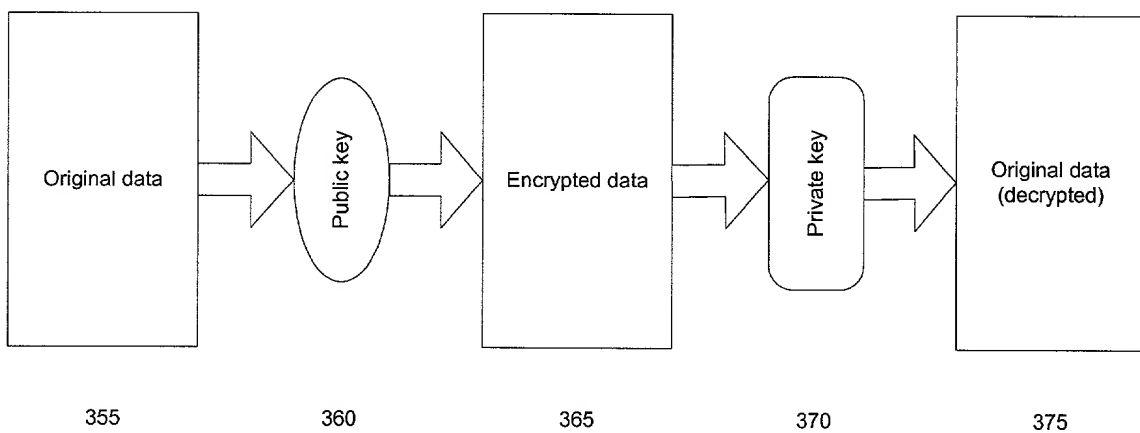


Figure 3B

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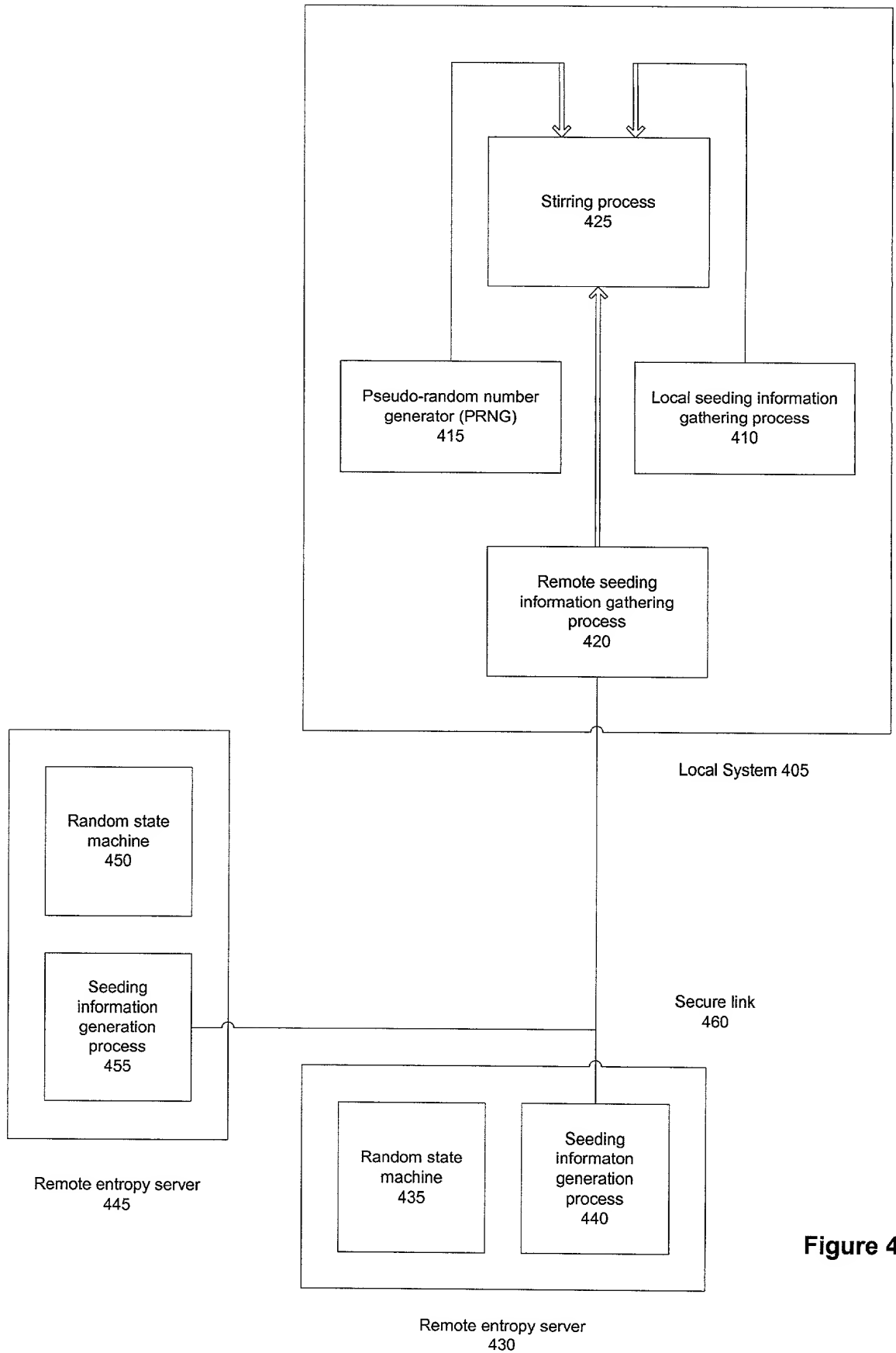


Figure 4

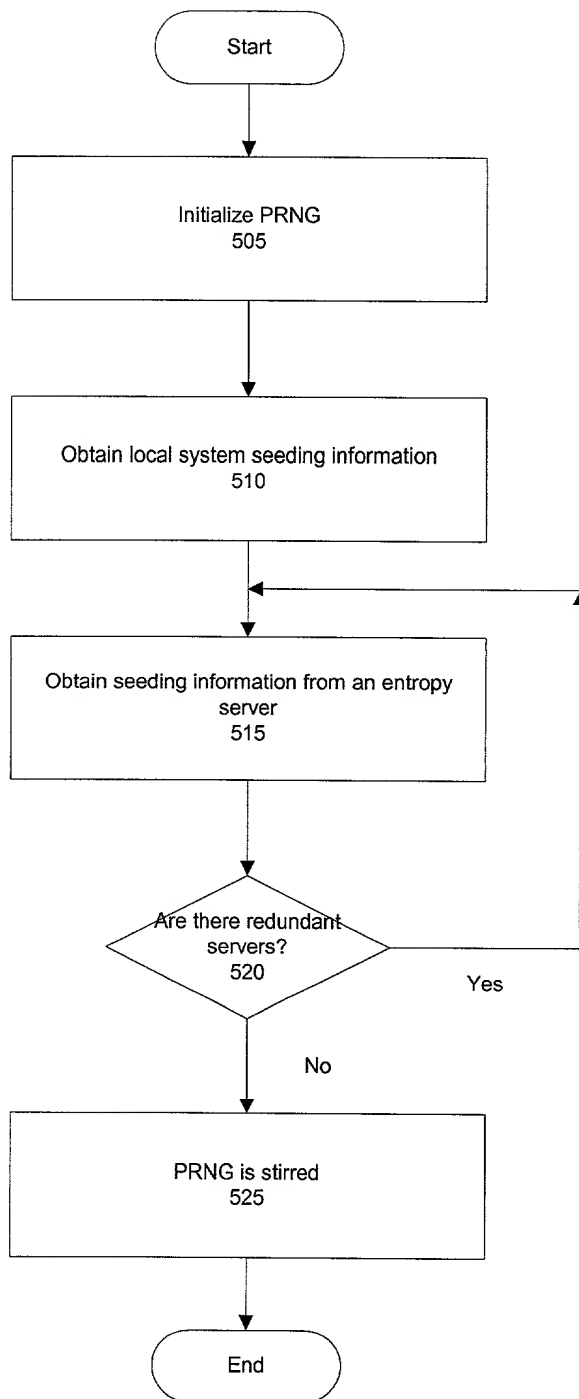


Figure 5

FIG. 6 is a flowchart illustrating a process for generating random data using a host's temporary public key and a server's public key. The process involves a host (600) and an entropy server (650) connected via a network (695). The host generates a temporary asymmetric key pair (605) and encrypts it with the server's public key (610). The encrypted key is sent to the server (615). The server decrypts the random data using the temporary private key (640) and stirs the local PRNG using the random data (645). The server then generates random data (625) and encrypts it with the host's temporary public key (630). The encrypted random data is sent to the host (635).

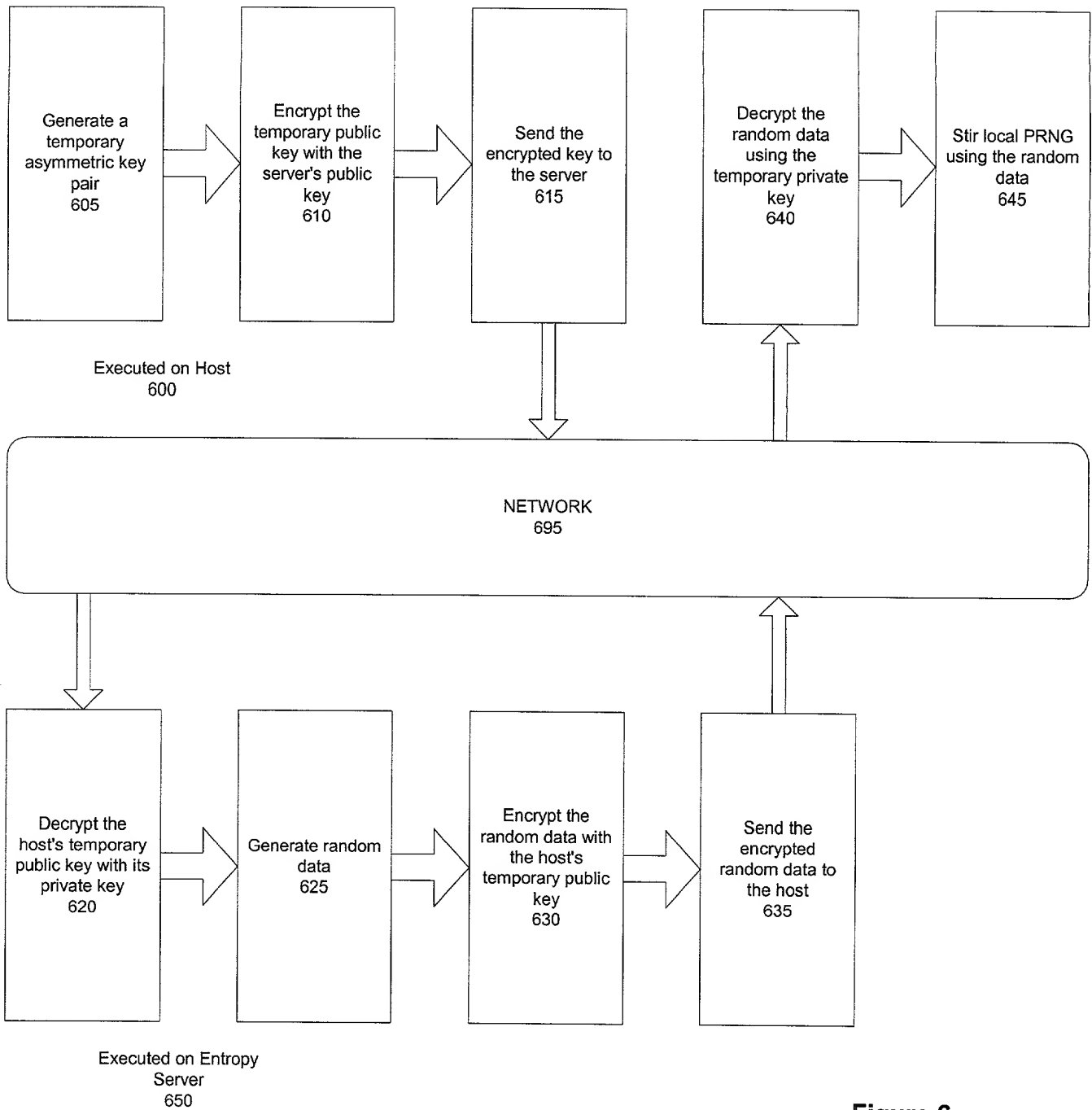


Figure 6

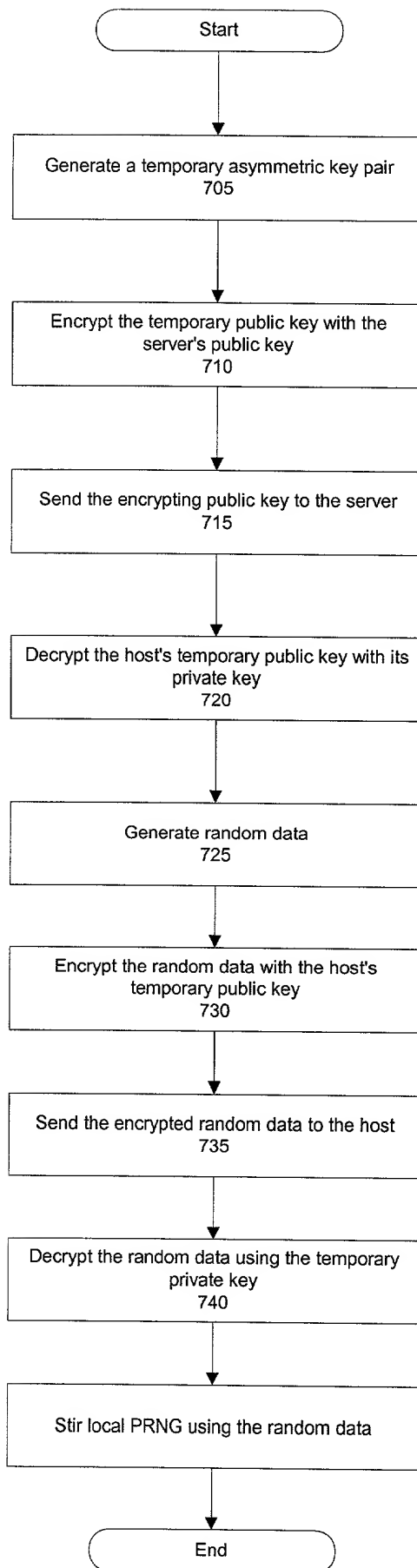


Figure 7